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SOVIET ASSESSMENTS OF THE
THEATER BALANCE OF FORCES:
A Case Study of the Beginning
Period of War

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1. INTRODUCTION

This paper examines the Soviet image of a future war and attempts to identify those factors which the Soviets consider important in assessing theater balances. While the Soviets may value many of the same components of military power valued in the West, we should not assume that they measure military capabilities, or weigh the relative importance of various capabilities, in the same way.

The source of data for this project is the Soviet military literature - a large body of material appearing in numerous journals and books published by the military publishing house. This literature is used to educate Soviet military officers and provide them with information about military affairs. Thus, we can learn how the Soviets want their officers to approach the problem of assessing military capabilities by studying the factors and indicators which the Soviets present in this literature. As discussed elsewhere, this linkage rests on the assumption that the factors the Soviets stress in this literature are the same as those they use when they assess their own military capabilities and try to determine how they are doing.

There are three basic approaches which can be taken to study how the Soviets assess military capabilities. The first approach involves studying Soviet military doctrine and deducing factors which should be important in Soviet assessments of military capabilities based on some understanding of this military doctrine. The second approach is an empirical one which involves studying the Soviet assessment literature to see what the data presents as identifiable factors. The third approach

is to study actual Soviet military structures and force procurements,
which are presumed to be results of the Soviets' self-assessment process,
and infer which military capabilities seem important to the Soviets.

This report combines the first and second approaches in an empirical-
inductive approach to identify factors in Soviet assessments by studying
Soviet discussions desireable military capabilities which they derive
from their own military doctrine. The beginning period of war
literature, which has not been studied systematically in the West before,
has been chosen for a case study because here the Soviets discuss both
their image of a future war and the capabilites they feel will be
valuable in preparing for that war. Thus, the value of the beginning
period of war literature is that it presents a Soviet derivation of
factors they consider important in assessing military capabilities based
on their military doctrine. These discussions can give us a better idea
of how the Soviets view the dynamic process of going from peace to crisis
to war. It is here that we find Soviet discussion of strategic-level
factors to form truely strategic-level assessments. In addition, the
beginning period of war discussions involve Soviet treatment of
unquantifiable, subjective factors such as surprise, strategic command
systems, and coalition performance.

1.1 The Purpose of the Soviet Literature

The research in this project is based on the assumption, as are other
reports in this series, that the Soviet military-historical literature is
used to inform and educate officers about current issues in military
affairs. In the literature we have studied, the Soviets use lessons from

history to discuss the nature of a future beginning period of war and how to best prepare for that future war. Many articles explicitly state that the historical lessons "are of great interest in contemporary conditions," and discuss current military affairs using concepts presented from historical examples. It is clear that the lessons presented in this literature have relevance for current Soviet approaches, regardless of whether the Soviets base their image of future wars on lessons learned from the past, or simply illustrate their image of future wars using contrived "lessons" drawn from history. Thus, factors which the Soviets stress in this literature indicate their approach to assessing military capabilities, and these factors will be used by the Soviets when they assess how they are doing.

1.2 Methodology

To carry out this study, the first step has been to consider the beginning period of war literature as a whole in order to see how the Soviets have structured their discussions. Understanding the overall structure of the literature is important in order to establish a context within which to properly interpret the articles. The second step has been to identify strategic-level factors which are discussed in the Soviet literature and which enter into their balance assessments. The third step has been to analyze how these factors, and the issues and concerns they raise, have changed over time. Three time periods have been considered and the treatment of strategic factors has been compared between these time periods. The choice of time periods: 1) from 1959 to 1968, 2) from 1969 to 1974, and 3) from 1975 to the present, is based on

what is commonly assumed to be distinct periods of Soviet doctrinal development. The first is generally associated with the "revolution in military affairs". The third is believed to reflect a strong reemphasis on theater conventional warfare. The second period represents a transition phase.

However, as shown in TABLE 1, the temporal distribution of the Soviet materials on the beginning period of war suggests two primary periods of intense research and analysis: 1953-1967 and 1981-present. Accordingly, the discussion that follows will focus more closely on these two periods of Soviet military scholarship.

One important question addressed in this research is how the Soviets combine various factors when carrying out comprehensive theater-level balance assessments. Do the Soviets integrate different factors, taking into account mutual interactions and trade-offs, or do they simply aggregate factors, creating a rank ordering of listed factors? While individual factors may be rather mundane and straightforward, such as the importance of transport systems or of combat readiness, it is the relative weighting and emphasis of these factors that indicates Soviet concerns and perspectives.

1.3 Sources

The beginning period of war material used in this research is drawn from a large Soviet military-technical literature which includes the vast output of Voyenizdat, the military publishing house, and a number of journals which are linked to the various armed services. The primary data source for this report is the Soviet military journal Voyenno-

istoricheskiy zhurnal (Military Historical Journal), which is an organ of the Soviet Ministry of Defense and, as such, is addressed to the Soviet officer corps. One of the journal's editors is the head of the Ministry of Defense Institute of Military History. Soviet studies of the beginning period of war have also been undertaken by high-ranking military officers at the request of the Ministry of Defense. One such prestigious study was carried out at the General Staff Academy, and parts of the resulting report appeared in Military Thought and in a subsequent book edited by Army General S. Ivanov.[1]

In the preparation of this report, we have analyzed about thirty articles from the Voyenno-istoricheskiy zhurnal, as well as an additional number of books and articles from other journals, from the time period 1959 to 1985. The time distribution of the articles from the Voyenno-istoricheskiy zhurnal, shown in Table 1, indicates that all these articles fall within either the 1959-1966 or 1981-1985 time periods. The group of articles in the early 1960's were part of the wide-ranging discussions in the military literature during what the Soviets have called the revolution in military affairs. This revolution in military affairs occurred as nuclear weapons and ballistic missiles were incorporated into the Soviet armed forces and the Soviet image of a future war was dramatically changed. The appearance of a group of articles in the Voyenno-istoricheskiy zhurnal during the 1980's, after a dearth of such articles since 1966, is harder to explain. As part of this report we shall investigate the possible cause and significance of this renewed interest in the beginning period of war.

2. THE BEGINNING PERIOD OF WAR: STRUCTURE

This report analyzes two aspects of the Soviet literature on the beginning period of war. The first aspect of the literature, a Soviet discussion of the overall historical evolution of the beginning period of war and of changes in the definition and meaning of this overall aspect is analyzed in the present chapter. The second aspect of the literature is the Soviet discussion of specific strategic factors presented as indicators of military capability, and this is analyzed in Chapter 3. Time series analysis has been applied to both aspects of the Soviet literature to investigate how Soviet assessments have changed over time.

This chapter presents the overall structure of Soviet discussions of the evolution of the beginning period of war and analyzes how Soviet writings on a specific issue, the definition of the beginning period of war, have changed over time.

2.1 The Structure of the Literature

Soviet articles trace the historical evolution of the beginning period of war as they discuss five major ways in which it has changed and describe three historical types of beginning periods of war. The overall structure of the literature can be summarized in matrix form, as presented in Table 2. The Soviets write that changes in the beginning

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period of war involves

- o the types of forces

- o the nature of combat

- o the scale of combat

- o the goals of the beginning period of war

- o the importance of the beginning period of war

This basic framework of Soviet discussions has not changed over the
period between the 1959-1966, 1977-1982, and 1980-1981 time periods. In this
section the Soviet image of each historical type of beginning period of
war shall be described without reference to the three time periods.

The Soviets describe the beginning period of the First World War as
involving the mobilization and concentration of main forces while border
forces engaged in routine battles which were of relatively minor
significance. These border clashes were limited in intensity and
spatial scope, involving relatively small groups of forces. The pri-
mary goal of the combatants during this period was to successfully achieve
full mobilization and deployment of their major forces, and they did not
try to achieve major war aims or strategic objectives. Thus, the outcome
of the beginning period of war did not have a decisive impact on the
further course of the war. Soviet sources state that this image of a
beginning period of war was largely relied upon by Soviet military
planners during the preparations for the Second World War.

The beginning period of the Great Patriotic War, which began with the
German invasion of the Soviet Union on June 22, 1941 was of an entirely
different character. In preparing for the attack on the Soviet Union,
the Germans concentrated the main portion of their forces at the initial

attack... a majority of the ... powerful before the ... The early ... of the war ... longer ... given multilateral ... and ... engaged in ... ... battles while ... main forces were ... ized and deployed ... mobilization and ... ment had taken place ... ... peacetime before the commencement of military hostilities. ... the Russo-... war ... the development of new armaments, in particular the widespread use ... rifled ... ... mobility ... ... that ... ... mass spatial ... and ... ... action which ... fast-moving a ... ... be ... the wars ... to win ... strategic ... ... successfully carry... ... ... campaign. ... ... that the ... ... of the ... ... increased and its ... ... of the ... ... during ...

Finally, the ... observed ... ... postwar period ... development ... nuclear weapons ... particular ... strategic missile forces, has ... ... changed the nature and importance of the ... ... of war. In particular ... conditions the combatants as ... ... strikes of ... on conventional forces which have been fully prepared but ... ... war. Combat action now has ... initial scope and an exceedingly dynamic ... nature. The goals of action during the begin... ... ... now be to achieve major war aims. Now, with a ... ... e, the results of the begin... ing period of war ... ... determine the outcome of ... ... action ... ... in extremely grave circumstances. In addition, the beginning period of war may only last for a ... ... of time, and thus ... ... that the only forces

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which [illegible] and those which are fully prepared is due to
[illegible] their distinction. The Soviets have
[illegible] of a future war with both as a nuclear or
[illegible] future war [illegible] systems affect military
strategy.

Soviet articles from all three time periods agree that there has been
[illegible] increase in the importance of the
beginning period of war, and [illegible] agree that the results of the
beginning period of war have had a decisive impact on the outcome of an
entire war. In addition, the Soviets have consistently emphasized that
combat during the beginning period of war has become extremely dynamic
and wide-ranging in scope, involving strategic operations [illegible]
operating over very large distances and [illegible] types of [illegible]
[illegible] operations. Thus, the general lesson drawn in the Soviet
beginning period of war literature is that this period has dramatically
increased in importance, but Soviet authors have differed over time both
in their discussions of the significance of this change and how to deal
with it.

1.1 The Definition of the Beginning Period of War

While the framework of Soviet discussions about the evolution of the
beginning period of war has not changed over time, the Soviet definition
of the beginning period of war _has_ changed. This definitional change
[illegible] raise two questions. First, is the change simply a matter of
semantics, or does it have significance as an indication of a new Soviet
approach to the beginning period of war? Second, if the change is

significant, what does it mean? Both these questions will be considered in this section.

Before looking at the specifics of the definitional change, it is worth pointing out that there are several indications that this change has some general significance. First, the definitional issue was at the center of a major discussion carried on in the the _Voyenno-istoricheskiy zhurnal_, and this discussion included contributions authored by high-ranking military officers. Second, while the difference in definition shows up most explicitly as a change in the date of the conclusion of the beginning period of the Great Patriotic War, from November/December to mid-July, 1941, the discussions surrounding this change dealt with some fundamental issues of how to deal with surprise attacks and contained explicit references to nuclear weapons issues. The 1960's discussions were closely tied to the doctrinal discussions concerning the revolution in military affairs, and it is reasonable to postulate that this linkage to larger issues has remained.

What has been the change in the definition of the beginning period of war? The contentious issue has been how to define when the beginning period of war ends. Over time, various definitions have been given that the beginning period of war lasts until 1) the main forces enter combat, 2) one side achieves its nearest strategic objectives, 3) the situation stabilizes, or 4) conditions change and one side is forced to change its initial war plans. Many Soviet discussions of the beginning period of war have considered the explicit definition of this period, mostly with reference to the duration of the beginning period of the Great Patriotic War. All the definitions state that the beginning period of war starts

when military hostilities first occur or war is declared, which in the case of the Great Patriotic War was June 22, 1941.

The first definition, that the beginning period of war ends when the main forces enter combat, was used by the Soviets before World War II and was decisively repudiated by that war.[2] As discussed in the previous section, the Soviets write that most theorists expected that the Second World War would start like the First World War.

During the 1959 to 1966 time period, there were numerous articles and discussions about when the beginning period of war ends. Several articles referred to conferences and meetings where this issue was discussed.[3] During this period the second definition, that the beginning period of war ends when the nearest strategic goals are achieved or are recognized as clearly unobtainable, was widely supported.[4] In 1960, an article cited a conference where the argument was made that the end of the beginning period of war should be determined using three criteria: 1) one side achieves its initial strategic goals, 2) it may last for several months, or 3) the plans of one side are broken.[5] Another author offered the definition that it should end when the first strategic turning point (perelom) occurs, and placed this during the beginning period of the Great Patriotic War as when the Germans were defeated at Moscow in December, 1941.[6] The third definition, that the beginning period of war ends when fronts have stabilized, was also presented, and by this definition the conclusion of the beginning period of the Great Patriotic War also occurred at the end of November.[7]

Thus, by both the second and third definitions, the beginning period of the Great Patriotic War ended at the end of November or the beginning

of December, 1941 when the Soviets began the Battle of Moscow. By that time the Soviets had been able to prevent the Germans from achieving their initial strategic objective of totally destroying the Soviet Army and for the first time the Soviets were able to go on the strategic offensive. In 1961 two senior officers wrote articles which summed up the discussions and seemed to present the officially sanctioned position to conclude the wide-ranging discussions. These authors supported the second definition, that the beginning period of war ends when one side achieves its initial strategic objectives.[8] During these discussions, the authors specifically rejected the notion that the beginning period of war ended within four weeks of the commencement of hostilities, considering that this was an outdated definition with no basis in reality.

In a 1971 article in the restricted circulation journal _Military Thought_, the fourth definition was given which stated that the beginning period of the Great Patriotic War ended in mid-July.[9] By this fourth definition the beginning period of war ended when 1) the front was temporarily stabilized, 2) the enemy rate of advance was sharply reduced, and 3) the enemy failed to achieve its initial objective. In a footnote to this article the author asserted that this was not a new definition for the end of the beginning period of war, and that it was presented "merely to confirm its correctness on the basis of additional studies."[10] This is a curious note because the new definition states that the beginning period of the Great Patriotic War ended around the middle of July, 1941, whereas earlier definitions specifically rejected that time frame. The new definition has been repeated in books since 1971 and has

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been used in articles in the _Voyenno-istoricheskiy zhurnal_ since 198?
when major discussions of the beginning period of war reappeared in that
journal for the first time since 1966.[11]

A modification of the new definition was discussed in 1981 by Marshal
Bagramyan who wrote that the beginning period of war ends when the
military leadership of both sides realize that initial plans will not be
achieved and they take concrete measures to principally change their
further actions.[12] Bagramyan, in agreement with the fourth definition
gave the middle of July as the end of the beginning period of the Great
Patriotic War and rejected the idea that the end of the beginning period
of war occurs as one side achieves its initial strategic objectives
because, as he wrote, neither side was able to do this during the Great
Patriotic War.[13]

* * * * *

Thus, the evidence suggests that the change in definition has some
broad significance, and was not merely a matter of semantics. This
immediately raises the issue of what this significance might be. To
investigate the significance of this change, it is valuable to consider
the tone of the discussions as well as the specific defining
characteristics.

The old formulation of the beginning period of war suggested that the
beginning period of war ended when the defender could effect a major
turning point or even seize the strategic initiative, or else when the
attacker achieved his initial objectives. The new approach is oriented
towards the defender's ability to frustrate the attacker's initial plans:

the beginning period of war ends when the defender's forces manage to escape destruction even if the attacker retains the strategic initiative. Thus, the argument can be made that the new concept places less ambitious demands on the defender's capabilities. The defender can consider that he has successfully concluded the beginning period of war, which is when the attacker has the strongest temporary advantages over the defender, if he can force the attacker to change his plans. The defender no longer has to gain the strategic initiative in order to have concluded the beginning period of war.

While this interpretation is speculative, it may indicate that the Soviets are changing their concepts of fighting the initial battles in a war when nuclear weapons are used because it is hard to conceive of a clear initiative when the opponents are exchanging nuclear strikes. One can also hypothesize that the new definition is related to the shift in Soviet doctrine away from an all-nuclear war towards the recognition of a conventional phase. The fact that there may be a conventional beginning period of war has been recognized in one of the more recent Soviet articles on the subject.[14] The implications of this change in definition of the beginning period of war shall be further discussed in relation to strategic factors such as the factor of surprise.

3. STRATEGIC FACTORS IDENTIFIED IN THE LITERATURE

This chapter presents analysis of major factors which appear in the Soviet literature as measures of military capability. A series of strategic factors have been identified and studied across the three time periods to measure their change over time.

One of the fundamental points the Soviets make about the beginning period of war is that the aggressor's use of surprise during this period allows him to seize the strategic initiative and gain significant temporary advantages. Soviet discussions of how to deal with adversarial use of the factor of surprise can be divided into two groups: those that advocate preparing in advance to such an extent that surprise has a less severe impact, and those that reccommend developing intelligence and detection systems to provide warning time. These two methods of dealing with surprise are by no means mutually exclusive as their combined use enhances a country's ability to deal with surprise. The Soviets present these two abilities -- the extent of preparations carried out in advance, and the gain in warning time -- as important measures of how well a country can deal with the beginning period of war and the factor of surprise. In this way, when they consider how they are doing versus the West, the Soviets apparently use these criteria as guideposts for assessment. These criteria by themselves are too general to be of great value, so the next sections of this report shall analyze how the Soviets have elaborated upon them and discussed just how they can be achieved.

3.1 The Factor of Surprise

According to the literature, the beginning period of war has increased in importance because it is now possible to achieve decisive war aims during this period. This, in turn, is possible in part due to the factor of surprise. The Soviets refer to various levels of surprise (vnezapnost') with tactical, operational, and strategic surprise corresponding to the levels of military art. They also discuss different forms of surprise; with references to surprise in timing, in place of operation, and in means of operation. In addition, the Soviets have discussed different degrees of surprise, with recent use of the term "total surprise." Surprise can also involve the use of misinformation and deception to confuse the enemy as to one's real intentions and actions.

When the beginning period of war may involve a surprise attack by an aggressor using forces readied in advance, there are two ways to lessen the impact of surprise: to be constantly prepared so surprise doesn't matter, or to obtain enough warning of an impending attack to be able to bring forces to alert. Soviet discussions about these issues reveal that authors have taken a range of different positions over time. The basic differences expressed by Soviet authors revolve around their assumptions about the degree to which it is possible or desireable to prepare forces during peacetime before an attack occurs. Major aspects of these discussions have been the question of the extent to which peacetime preparations can predetermine the course of the beginning period of war, and the potential impact technology and people can have on this process.

Soviet writings on this issue have presented different positions in each of the three time periods studied. At the beginning of the 1955-

1966 time period, it was argued that it is both possible and desireable to have forces fully prepared in advance on a steady-state basis. Later in this time period, beginning in the mid-1960's, authors argued that, while it may be possible to have forces constantly ready, it is not necessary because there will be a threatening period before an attack that will provide enough warning to bring forces to full readiness. During the 1980-1985 time period, the Soviets have emphasized that a clear threatening period may not occur because nuclear weapons can be launched without warning, but that it is not desireable to keep forces on full alert on a steady-state basis because this would appear to the opponent as being on a war status and would be too provocative. Thus, over time the literature has more fully recognized both military and political problems involved in attempts to lessen the impact of surprise.

The first position, that it is both possible and desireable to pre-mobilize forces and prepare defenses in advance, was presented by a Soviet author in 1959 who argued that such preparations could enable a country to ward off an attack.[15] This concept, that preparations carried out before a war can help prevent an attack as well as helping to ward it off, has been presented in Soviet sources at various times. The logic of this first position supports maintaining military forces on full alert and in total preparation as a steady state, even during peacetime.

The second position was presented later in the 1960's as sources indicated that there might be a threatening period before the actual launching of an attack so a country could rely on warning time to bring its forces from partial to full alert and readiness.[16] The threatening period is defined as beginning the moment that an aggressor decides to

attack and ending when the attack actually takes place. It was
recognized that in tense situations a threatening period could arise
without an actual decision to attack, and that in some cases the
threatening period could end without any attack if the imminent conflict
was avoided through peaceful means, such as occurred in the Cuban missile
crisis.[17] Due to the existance of a threatening period, the proper use
of strategic intelligence sources could allow a country to neutralize the
factor of surprise. Belief in this second position would lead the
Soviets to feel that it is not necessary to maintain forces on full alert
because a threatening period will allow time for a rapid alerting
process, but that it is very important to possess the capability to
obtain adequate warning time.

Finally, in the 1980's, Soviet sources have presented a third
position. They indicate that it is not possible to have all measures
taken in advance, or to complete them during a threatening period,
because 1) now there may be an attack without any threatening period, and
2) total preparation of forces can appear to the enemy as being a move to
a war footing and this may provoke a war.[18] This recent Soviet position
concerning the alert status of the armed forces clearly recognizes the
problems and implications of various <u>strategic postures</u>.
Correspondingly, other Soviet sources have argued that today no aggressor
can avoid suffering an inevitable retaliatory blow after attacking the
opponent because the defender's forces are either survivable or can be
launched under attack. It is unclear how these views affect Soviet
thinking on theater warfare, and further investigation is necessary.

In any case the Soviets recognize that it is not politically possible

to have all forces on high alert and that, at least in the case of intercontinental war, a clear threatening period may not occur before an attack. This has served to sharpen Soviet interest in the study of the beginning period of war.

In the context of the above the Soviets have discussed various preparatory actions, and have divided these preparations into two categories: preliminary preparations and direct preparations.[19] Preliminary preparations, which include a wide range of economic, political, and military measures, can be begun long before a war, whereas direct preparations are begun during a threatening period closer to the possible beginning of a war.

3.2 Preliminary Preparations for the Beginning Period of War

The Soviets place particular emphasis on a series of preliminary military preparations including:

o   premobilization and strategic deployment

o   the development of the economic base

o   the development of military science

Many of these measures are considered part of strategic deployment (strategicheskoye razvertyvaniye) which is closely interconnected with aspects of mobilization and preparation.[20] It is the capability to carry out these measures, and the degree to which a country has carried them out, which the Soviets evaluate when they carry out their balance assessments. We have not yet gathered sufficient data concerning these factors to be able to present a clear analysis of how Soviet treatment has changed over time, so the findings in this section must be considered

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tentative.

The Soviet literature emphasizes that premobilization should be carried out to such an extent that one can begin initial operations immediately at the outset of a war. As one author wrote in 1981, before the beginning of a war it is necessary to have forces and means in a readiness condition such that they are able to ward off a surprise attack without requiring additional completion of mass mobilization.[21] In addition, earlier sources indicate the importance of preparing engineering defenses in the likely theaters of military action and point to problems in the Great Patriotic War with Soviet forces which were placed directly along the borders without the support of fortified defenses.[22]

Soviet discussions of the ability to hide premobilization measures indicate that they consider this an important factor in determining a country's military capabilities. This consideration is applicable to the Soviets' own military capabilities even though they don't explicitly discuss actions they may take to hide their own premobilization.[23] Soviet sources indicate that it is very difficult to hide premobilization measures, as reconnaissance capabilities have greatly improved since the Second World War. Nevertheless, the Soviets describe several ways that premobilization can be carried out in secret and stress the historical importance of this secrecy.

First, the Soviets write that measures should be carried out gradually over a long period of time so they are easier to hide. Sources from the 1953-1966 time period seem most interested in hiding preparations, whereas later sources write more often that additional measures will be

needed. A 1960 article observed that mobilization before the First World War was openly carried out as quickly as possible, whereas before the Second World War it was done in secret over a long period.[24] Soviet articles in 1959 and 1966 presented percentages and a chart to emphasize that the tendency in the 1930's was to begin strategic deployment measures earlier in the prewar period.[25]

Additional sources, including one from 1984, observe that premobilization can be carried out in stages so that it is harder to detect. A 1963 article emphasized that, while rapid and successful strikes require massing of forces, these large force formations cannot be hidden so surprise should be achieved through inconspicuous measures, and not by rapidly creating strike forces.[26] Citing German actions, the 1964 article noted that a first stage involves the gradual mobilization of forces over a long period of time, and a second stage involves the formation of large groups of forces, which cannot be hidden so it is done at the last moment before a war.[27]

A second way to hide preparations is to use disinformation instead of, or along with, masking preparations. Sources from both the 1959-1966 and 1980-1985 time periods write that this includes both the use of increased diplomatic action and intensive negotiations to deceive the enemy, and carrying out military preparations under the pretext of conducting military exercises, standard maneuvers, force replenishment, or strengthening defenses.[28] A 1961 source cited the German use of a prelude of "local wars" to prepare its economy and forces for the attack on the Soviet Union, and added that modern local wars must be carefully studied because they too may lead to a new world war.[29] Soviet sources

cite the German use of diplomatic, press, and state organs in a massive disinformation campaign to create the impressions that they were actually preparing for an attack on England, not the Soviet Union.[30] They also mention the World War I practice of world leaders who took well-publicised vacations to add to the pretext that their countries were not preparing for war.

The second preliminary preparation, which the Soviets have cited in all time periods, involves economic measures introduced to strengthen the defense capability of the Soviet state. These include the common measures to improve the material-technical base of the economy, especially the heavy and military industries, and emphasis is placed on historical efforts to become economically independent, especially in areas such as the production of synthetic rubber and special metals.[31] The Soviets also present the development of better railroad and road transport systems as being particularly important, and some sources say that the Soviet Union did not adequately do this before the Great Patriotic War.[32] In this process of economic preparation the Soviets attach great importance to having a central coordinating and planning organization to direct preparations.

The third preliminary preparation discussed by the Soviets involves the development of military science. As mentioned above, it is the task of military science to analyze the likely nature and characteristics of military operations in a future war, such as predicting the overall nature of the beginning period of war. During the 1959-1966 time period, Soviet sources focussed on problems encountered in World War II, citing the huge number of directives which were issued in the beginning period

of the Great Patriotic War on how to conduct military operations because many prewar military principles were found to be incorrect.[33] In reference to the Great Patriotic War, Soviet authors remind readers that it is necessary to have clear plans to ward off an attack as well as having plans to carry out an attack. Before the Great Patriotic War the Soviet military had primarily focussed on the conduct of the offensive and was not prepared for the long period of strategic defensive operations which they were forced to carry out.

In the 1980's, the Soviets have focussed on the need to fully articulate alternative war plans. As a 1981 source wrote that planners should work out several variations of the new operations they intend to use before a war starts and take into account the enemy's plans and possible actions.[34] Thus, it is very important to know the enemy's military strategies and methods as well as to have your own proper military theory which has studied how to make use of all new types of weapons. In 1985, Gareyev (then Chief of the the Military Science Directorate of the General Staff) wrote that superiority in military art is one way to increase combat capability without needing any additional material expenditures.[35]

Thus, the Soviets assess a country's capability to carry out preliminary preparations largely in terms of how well that country can conceal those preparations. Measuring the ability to keep preliminary preparations secret was emphasized much more than any other aspect of those preparations. Over time the Soviets seem to have recognized the increasing difficulty of hiding preparations, but have always discussed the benefits of disinformation if hiding preparations is not possible.

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3.3 Direct Preparations for the Beginning Period of War

Whereas the literature suggests that preliminary preparations should be conducted on a steady basis under contemporary conditions, direct preparations are those taken during periods of increased threat of war or during a threatening period, if a threatening period occurs. As mentioned above, the Soviets write that a threatening period can begin by chance during a time of high tensions or it can begin with one country's conscious decision to start a war. The threatening period ends when a crisis is resolved through peaceful means or when an attack is launched.

Soviet sources since the late 1950's have discussed the possibility of a threating period but over time they have become increasingly doubtful that an obvious threatening period will occur.[36] Nevertheless, despite the unresolved issues of whether a threatening period will occur and what form it will take if it does occur, it is clear that the Soviets have considered it important both to be able to detect an opponent's direct preparations and to be ready to carry out one's own direct preparations.

Until the 1970's, Soviet sources indicated that there would be some concrete identifiable signs of enemy preparations which, if detected and acted upon, would allow the placing of forces on full alert.[37] A 1959 source described modern forces, such as rocket, air, naval, and mobile ground forces which are ready for action in quantities sufficient for achieving strategic goals in the beginning period of war, as beginning military action with surprise attacks launched from their basing regions. This source, citing foreign authors, wrote that the strategic deployment of these forces "**basically comes down to their most rational permanent**

deployment [basing] in all intended theaters of military action and to secretly shifting, to a limited degree, only parts of these forces during a threatening period (which, besides, may not even occur)."[38]

During the 1959 to 1966 period, many Soviet articles recounted various direct military preparations carried out in World War II, but a remarkable passage in a 1963 article by Col. Lipitskiy explicitly described contemporary preparations:[39]

> Many ... signs of the threatening period no longer arise. However, some signs remain. For example, placing the highest command organs on a war footing; turning on new communications networks; bringing troops to full combat readiness; dispersal and maskirovka of naval and aviation weapons.
>   Along with these familiar signs, new and extremely important signs will inevitably appear.
>   It is obvious that no country today will risk starting a rocket-nuclear war without taking serious preliminary measures in the areas of anti-air and anti-nuclear defense. Besides this, it is impossible to use contemporary aviation, operational, and strategic missiles without starting up complex servomechanisms and guidance systems. In order to use nuclear warheads (yadernye boyepripasy), one has to assemble (sobrat') them and deliver them to airfields and missile launch sites. Therefore, defining the threatening period as the interval of time used for direct preparations for the first operations of a war, retains its meaning even in contemporary conditions. But such a conclusion by itself does not teach very much. Moreover, it would be an unforgiveable mistake to count on the presence of a **clear** threatening period in future wars. The entire experience of imperialistic wars leads us to a different conclusion.

Lipitskiy's reference to the need to assemble nuclear warheads and bring them to launch sites appears to apply to Soviet weapons because at that time the KGB appears to have had physical control over nuclear warheads which, in time of crisis, would have been transported to missile sites for emplacement on the missiles.[40] Lipitskiy indicated that, while some signs of a threatening period will probably still be detectable, the traditional "clear" threatening period may no longer occur. Nevertheless, the Soviets, according to Lipitskiy, expected that there

would be some warning before a U.S. attack because gyroscopes and guidance systems had to be started up. Later in the article, Lipitskiy repeated that there may not be a clear threatening period, and added that it is not impossible for an aggressor "to some degree" to hide direct preparations for a first strike, so the bottom line is that ability to detect preparations and constant combat readiness of the troops have decisive significance.

Other sources from this period describe additional important direct preparations which could be made during a threatening period. These include carrying out reconnaissance of the entire front in order to determine the plans and deployments of the enemy, placing command organs on a war footing, concentrating forces, and organizing operational security and command.[41] Lipitskiy mentioned a range of military measures such as giving troops full ammunition supplies and increasing stocks of fuel or other supplies. A range of military-economic actions are to be expected, such as changing railroad schedules, increasing military transportation, and having ships return to ports or bases. In addition, the economy can be secretly shifted to a war footing far in advance of a war, using local wars to cover this action.

Various articles also described the less explicit indications of a threatening period as including great diplomatic activity, domestic militarism and censorship, military negotiations with allies, and general increases in tension in international affairs. Lipitskiy goes so far as to cite a French theorist to the effect that, in order to catch the defender unawares, the aggressor should strive to ease tensions and conduct successful negotiations.[42]

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In contrast to articles in the 1960's which discussed explicit signs of a threatening period, a series of sources written in the 1980's by prominant military officers suggest that there may not be a "clear" threatening period. While these articles do not discuss concrete signs of direct military preparations, they do continue to indicate, in part based on World War II experiences, that there will be a period of increased tensions during which a country can raise the combat readiness of the armed forces.[43] For example, in 1985 Yevseyev noted that today it is necessary to take the basic preparatory measures to foil an attack as a real threat of attack arises.[44] He went on to add that the combat readiness of the armed forces and the firmness of the leadership of the country and armed forces must be increased as the threat of surprise attack becomes more serious. At the same time, Kir'yan noted that the massive use of electronic and technical means of intelligence gathering allows one to detect the massed launch of missiles and perhaps to detect enemy preparations for a first strike.[45] In contrast, in a book also published in 1985, Gareyev emphasized that an attack could take place without any preparations, and that you can no longer rely on being able to finish preparation measures during a threatening period.[46] Gareyev also noted that it is not politically plausible to have total preparations made in advance of a war because such a level of preparation and mobilization would appear to the enemy like being on a war footing and, as he implicitly indicates, this could provoke a war.

While these discussions present a range of positions, they do indicate that the Soviets still believe that there will be a period of increased tensions, if not explicit signs of a threatening period, during which

they will be able to increase the readiness of their armed forces. An important area for further research concerns the issue of how or when the Soviets may decide to initiate their direct preparations, and how they expect these preparations may affect an evolving situation.

3.4 Intelligence Systems

A series of Soviet sources state that it is important to carry out preliminary and direct preparations under cover in order to surprise the opponent. On the other hand, the Soviets seem to plan to make a series of direct military preparations which depend on the ability to obtain indications that an enemy is preparing to go to war. This points to a Soviet belief that it is necessary to have a good intelligence (razvedka) capability, and that the possession of such a capability is an important factor in assessing one's overall military power.

During the 1959-1966 time period, many Soviet sources were concerned with the need to have rapid transfer of intelligence data to the highest command levels. For example, one author in 1959 wrote that well-organized intelligence could exclude the possibility of a surprise strike, and expressed the need to have constant daily checking ('kontrol') of the status of the enemy and its troops in all theaters of military action.[47] Several sources have gone on to mention the need for the High Command to have intelligence channels independent of lower commands, in part due to the delays which multi-tiered structures can create.[48] Finally, many sources have written that it is necessary for the strategic leadership to rapidly process the intelligence information and take the necessary actions, often referring to Stalin's failure to do this in

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response to warning of the German preparations.[49] Thus, in their 1954-1966 assessments of intelligence capabilities, the Soviets stressed the need to rapidly obtain information and transfer it to the highest levels.

Soviet writings from the 1980-1985 period have been more concerned with the capability to fully monitor all enemy plans. These sources indicate that an intelligence system optimally should be able to gain information about enemy war plans, strategies, development of new weapons or methods, and to warn of enemy intentions.[50] This has often simply mentioned as the need to be able to unmask the schemes of the aggressor.

Over time, the Soviet concerns about intelligence systems appear to have changed as these systems have changed. Thus, in the early period when direct intelligence links were stressed as the concern was to reduce the processing time for intelligence data as it moved from the lower to the higher command levels. In the 1980's this concern has been muted as the focus has shifted to the need for more fully capable intelligence-gathering systems.

3.5 Strategic Command and Communications Systems

The Soviets have considered the proper design of a strategic command system as an increasingly important factor in assessing the military capability of a country and its armed forces. Soviet articles from all time periods make widespread reference to the Soviet problems at the beginning of the Great Patriotic War when they had to establish new strategic command organizations because the leadership had not correctly anticipated the nature or requirements of a future war.[51] The prewar strategic command system was set up so that the High Command directly

commanded the Fronts and Fleets, but the experiences of the first days of combat showed the necessity of intermediate command organs to bring strategic leadership closer to the troops. While articles from all three time periods make this general point, they discuss the more specific strategic factors in different ways.

Articles in the Voyenno-istoricheskiy zhurnal from the 1959 to 1966 period discuss the decentralization of strategic command but do not focus on the specific institution of commands of strategic directions. As Rukhle wrote in 1959, the High Command could not operationally lead operational-strategic actions of interacting groupings of combined-arms forces, especially in the rapidly changing conditions of the beginning period of war. This required a certain decentralization of strategic leadership, which took the form of the creation of commands of strategic directions, in order to coordinate the actions of groups of Fronts.[52]

Soviet sources from the post-1980 period focus much more on the institution of commands of strategic directions. While these commands of strategic directions are credited with a certain amount of positive influence on war actions, they apparently had problems because they did not have adequate forces at their command to act independently, so they often had to appeal to the High Command for support. In addition, the directional command was often simply a transformed Front command without independent apparatus, but experience showed that the successful conduct of a large offensive operations required the support of an independent command apparatus.[53] Finally, the High Command began to issue orders directly to the Fronts, bypassing the directional commands. This had negative effects because time and clarity were lost while the Fronts

double-checked different sets of orders with both the directional and High Commands. These problems led to the gradual dismantling of the directional commands. Soviet sources conclude that the intermediate command links can have positive effects under certain conditions, and point to the Far East Command which was positively regarded and has recently been reestablished.[54]

In addition, Soviets sources from the 1980's make a series of points about evaluating the proper design and use of strategic command systems. First, it should be expected that command and control organs will be some of the first targets to be attacked.[55] Thus, as also mentioned in 1961, the command system must be ready to operate under conditions when the enemy has the strategic initiative and when the system itself is under attack.[56] Second, because of the possibility of sudden attacks, strategic command systems should be prepared so that they do not have to be improvised or reorganized in the beginning period of war.[57] Third, the staffs of military districts will be transformed into parts of Fronts and Armies, and this process must be thoroughly prepared in advance so as to occur with a minimum of time and confusion. Fourth, as discussed above, commands should be decentralized to the extent necessary to be able to operate in rapidly changing conditions and handle highly maneuverable forces. Finally, it is stressed that each level of strategic command must have control over adequate amounts of the strategic reserve forces so they can control the course of combat during the beginning period of war (see discussion below). Strategic commands must have the proper structure and principles of operation worked out before a war to correspond to character of military action in that war.

and be able to control and rapidly maneuver effective amounts of strategic reserve forces.[58]

Soviet sources also place a great deal of emphasis on the importance of being able to maintain communications in the beginning period of war. Articles from different time periods express the expectation that communications assets will be high-priority targets which must have high technical readiness, and cite the major efforts made in the Great Patriotic War to retain constant contact with units despite the destruction of many communications assets.[59] Articles from the 1980-1986 time period appear to stress the need for reliable communications more than do articles from the early period. For example, an 1984 article recalled how initial German attacks on radio stations and on both military and governmental communications systems placed the Front and Army commands out of contact with the High Command and the General Staff, so many commands were not fully informed about the conditions and progress of the war.[60] Another article from 1984 said that the protection of frontal communications is one of the PVO's most important roles during the beginning period of war.[61] They consider the possession of a robust communications system an important factor in evaluating the military effectiveness of a country.

Thus, Soviet consideration of strategic command systems has focussed on their ability to rapidly move from peacetime to wartime status as a war begins, and to adjust to new requirements during the course of a war. Reaction time is presented as a major indicator of this capability. In addition, the Soviets have paid increasing attention to the institution of commands of strategic directions, suggesting that these intermediate

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command links can be very valuable under certain conditions. Soviet discussions of communications systems have also placed increasing stress on the need for such systems to be survivable and decentralized to the extent needed for optimal operation in an environment of rapid and dynamic combat. Thus, there appears to be a growing recognition that limited decentralization of command and communications may be appropriate under some contemporary conditions.

3.6 Strategic Reserves

The Soviets consider that changes in the nature and importance of the beginning period of war have increased the importance of the proper organization and use of strategic reserve forces. Soviet evaluations of strategic reserves focus on two criteria: that strategic reserves be configured so they can be rapidly maneuvered and brought into action, and that the strategic leadership have direct control over a sufficient quantity of strategic reserves to be able to impact the flow of the war.

Articles in the <u>Voyenno-istoricheskiy zhurnal</u> from both the early and late time periods discuss the need for organizing the structure of the strategic reserve forces so that they can respond to the rapidly-developing action which will occur during the beginning period of war.[62] One article from 1966 mentioned that the Allied command of France and Britian suffered both from a lack of adequate reserves and from the lack of close coordination which would enable the reserves to be rapidly shifted to where most needed.[63]

A series of Soviet articles have also stated that the strategic leadership organs must have direct control over strategic reserves in

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order to be able to affect the course of combat action during the beginning period of war.[64] Several articles from the 1959-1966 period state that the Germans held only about 12 percent of their forces in the General Staff reserve when they attacked the Soviet Union, and that this contributed to the wasting away of German offensive potential which finally ran out at the battle of Moscow.[65] Another article from this early period suggested that the lack of reserves under a strong unified leadership contributed to the French and British losses despite the slight numerical superiority of the combined French and British force.[66] In the period after 1980, articles on the value of commands of strategic directions note that the lack of control over an adequate force of strategic reserve forces was one of the major reasons why the directional commands were of limited effectiveness.[67]

Thus, the Soviets consider the possession of strategic reserves in adequate strength and under close command by the strategic leadership to be an important component of military capability. Whereas early articles focused on the need for adequate quantities of reserves, later articles were oriented towards the importance of command structures in the use and shifting of reserves.

3.7 Additional Strategic Factors

In addition to the above-mentioned capabilities and preparations which the Soviets feel are important in assessing a country's defense capability, the beginning period of war literature raises a series of other factors which are considered in balance assessments.

A first factor is the design of logistics and supply systems. The

Soviets use the experience of the beginning period of the Great Patriotic War to draw lessons concerning the best way to organize logistics and supply systems for the future. Once again the Soviets emphasize that an incorrect pre-war image of the beginning period of war led them to design their logistics system based on the assumption that there would be time to mobilize.[68] As a result, the supply system consisted of large stationary depots from which, it was assumed, supplies would be moved to smaller local supply centers. Command of the supply system was divided between General Staff and NKO directorates as well as being coordinated by Front commands. Due to the suddenness of the German attack and the rapid mobility of many forces, the supply system was totally inadequate. Many supplies were captured at the stationary central depots while lower-level supply centers ran out of material. Fronts and Armies had to go directly to the NKO for supplies, creating a chaotic command situation. All requests for supplies were uncoordinated.

Thus, the Soviets conclude, a supply system must have centralized command of all rear supplies, there must be independent operational-level rear commands, and supply units and distribution centers must be mobile and dispersed. The system should also be prepared for providing supply under conditions of massive evacuations. Due to the anticipated nature of the beginning period of war, a supply system must not assume that it will have time to move supplies from central to local depots.

Another factor the Soviets discuss is the effect of coalitions on military balances and on the conduct of warfare.[69] The degree of integration in economic, planning, and military respects is very important according to Soviet sources, as is the problem of organizing

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reliable command of coalition armed forces. In one case, an author wrote in 1969 that the lack of integrated or unified command between the French and British forces in world war II negated their numerical superiority.[70] The Soviets write that allies should unite their economic and military resources and develop shared doctrines and strategic plans. The effectiveness of an alliance, according to the Soviets, is measured by much more than simply military means and cooperation, as the objective is as total a degree of integration as possible.

The Soviets also discuss sources of uncertainty in assessing military capabilities. First, they write that in today's conditions of rapid technological change, decisions often must be made without sufficient experience. For example, it is impossible to reproduce conditions such as the enemy use of weapons of mass destruction, so preplanned military operations is limited.[71] In addition, they mention that it is difficult to test fully the capabilities of new weapons without wartime conditions, so one may encounter unexpected weapons effects, lethalities, and vulnerabilities. Second, a 1960 source wrote that military forces will have habits based on previous wars and these may be very difficult to change.[72] Third, the country as a whole may respond unpredictably to massive surprise attacks. In this respect, sources in the 1960's write that it is important to prepare for the psychological reorientation of the people and the armed forces so they can deal with these impacts.[73] Finally, morale is a factor, as the French and British suffered from low morale as a result of the 'phony war' and the passive strategies of their countries.

A final capability which has been discussed in Soviet sources is the

need for defenses prepared in advance of a war. One source in 1963 wrote that anti-air and anti-nuclear defenses would be prepared before any country would risk beginning a nuclear war.[74] Other authors in the 1980's have written that in a war which may be of long duration it is very important to have air defense of industrial centers as well as of airfields, troops, and command organs.[75]

4. CONCLUSIONS

This study has shown that the the beginning period of war literature can provide information about a wide range of issues and factors which the Soviets consider important in assessing military capabilities. Analysis of Soviet treatment of strategic factors has shown that Soviet assessments have changed their focus over time from the 1959-1966 period to the 1980-1985 period:

1) Discussions of the factor of surprise have shown increasing Soviet recognition of both political and military constraints on measures to reduce the impact of surprise.

2) Discussions of preliminary preparations show that the Soviets expect that these measures will commence very early, and over time they have recognized that the importance of disinformation has increased because improved reconnaissance abilities make it difficult to totally hide preparations.

3) Discussions of direct preparations for war have, since the early 1960's, stressed the importance of these measures even though over time the Soviets have increasingly realized that there may not be a "clear" threatening period.

4) Discussions of intelligence systems have shifted from a focus on the importance of achieving rapid rates of data flow to the high command to a focus on the need to acquire full data on enemy plans and intentions.

5) Discussions of strategic command and communications systems over time have focused more on the need for intermediate and partially decentralized systems.

6) Discussions of strategic reserves have moved over time from using quantitative measures of reserve capabilities to using measures related to the quality of command and utilization proceedures.

This analysis has shown that the Soviets feel that the level of preparation of the armed forces should be raised in accordance with a possible increasing level of threat of war. As tensions grow, and

especially if a threatening period is judged to have begun, the required level of military readiness increases dramatically. The Soviets seem to believe that, although there may be no "clear" threatening period, they still will be able to detect increasing levels of threat of war and raise their preparatory and readiness levels accordingly. This is a further indication that the Soviets directly link their desired levels of military capability to the level of threat of war. As stated above, this implies that Soviet assessments of military balances can change dramatically depending on their perception of the level of threat of war. Thus, balance assessments in peacetime conditions may use different criteria than balance assessments in threatening periods.

This analysis has also investigated whether the Soviets aggregate or integrate the many factors which enter into composite assessments of military balances. While there have not been any explicit examples of the Soviets integrating factors with clear interactions or trade-offs, there have been several cases of implicit trade-offs. For example, the Soviets recognize the negative interaction between carrying out preparations for war and achieving surprise in that war. Their response to this seems to be that this trade-off can be managed through carefully planned preparations and concealment measures including the use of disinformation and maskirovka. In one case there was an implicit statement of a trade-off between coalition unity and numerical superiority where the lack of unity and cohesion in military alliance planning, accompanied by morale problems, negated a slight numerical superiority in forces. Apart from these examples, we have yet to uncover further evidence of how the Soviets integrate the factors in their

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assessments. They do consider factors which are related to one another, such as strategic command and the need to have adequate levels of strategic reserves at each level of command, but most factors are aggregated in the literature.

Another issue addressed in this report has been the relative importance of qualitative and quantitative measures of armed forces. When articles have presented numerical data they have given both purely quantitative measures, such as the percentage of overall forces which were involved in the beginning period of war or ratios of numbers of divisions, and somewhat qualitative measures, such as the ratios of qualitatively new types of weapons.[76] Over time between 1959-1966 and 1980-1985, discussions of preliminary preparations and strategic reserves have shown decreased use of quantitative measures relative to qualitative ones. In general, many articles have also emphasized the growing importance of qualitative advances in weapons and technology. Thus, in balance it appears that the Soviets have increasingly been using qualitative measures over quantitative ones in their assessments.

One overall factor which is prevalant in many Soviet assessments of military capabilities is that of time. Whereas Western analysts may use quality of performance as the dominant criteria for evaluating military forces and means, the Soviets use a criteria of how long it takes to perform a given mission. For example, they measure the effectiveness of intelligence systems in terms of how long it takes information to reach the top, the effectiveness of command systems by how long it would take to reconfigure them to a wartime status, and the effectiveness of supply systems by how little time they require for full operation. Even in

discussing strategic nuclear forces, the Soviets express the need for higher alert levels and the need to detect enemy actions as soon as possible.

This raises the issue of how the Soviets assess crises. They express the need to carry out preparative measures as soon as a threatening situation arises, and the set of criteria they use to assess the military balance during such a period may generate very different conclusions than the set of criteria used during peacetime. The time factor may assume great significance for the military as they may not be able to accrue the time they feel is necessary for warning and preparations. The Soviets have recently addressed the issue that being fully prepared for war, while this may be militarily possible, is not politically plausible because such a level of military preparedness is not clearly distinguishable from a war footing and thus is provocative. It is these issues, of how Soviet assessments may shift during the process of moving from peace to beginning period of war and of what actions the Soviets may take based on these assessments, which we have begun to address. Nevertheless, this subject remains an area for further research involving a wider range of Soviet sources.

The beginning period of war literature has provided a direct view of strategic factors which shape the framework for Soviet theater-level military assessments. Over time we have seen how the basic assumptions which lie behind the assessments have changed as the expected nature of the threatening period has been reevaluated. In order to further probe the details of the Soviet balance assessment process, it is necessary to expand our analysis of the beginning period of war literature to more

firmly establish possible changes over time in the Soviet treatment of the major factors we have identified so far.

TABLE 1: Temporal Distribution of Source Materials

Year	VIZn Articles	Other Sources
1959	3	–
1960	4	–
1961	3	–
1962	–	–
1963	2	–
1964	–	–
1965	1	–
1966	3	–
1967	–	–
1968	–	1
1969	–	–
1970	–	–
1971	–	1
1972	–	–
1973	–	–
1974	–	1
1975	–	–
1976	–	–
1977	–	–
1978	–	1
1979	–	–
1980	–	–
1981	2	–
1982	–	–
1983	–	–
1984	7	–
1985	3	2
TOTAL	28	6

TABLE 2: Three Soviet Images of Historical Types of Beginning Periods of War

Descriptive Categories	World War I Type of Beginning Period of War	World War II Type of Beginning Period of War	Contemporary Type of Beginning Period of War
Forces Used	Relatively small units of border forces	Major groups of forces deployed in peacetime	Nuclear rocket or conventional forces
Type of Combat	Limited border clashes of relatively low intensity	Dynamic all-arms combat	Massed nuclear or conventional strikes
Scope of Combat	Limited	Large	Global
Goals of Military Action	Carry out covering battles while major forces mobilize and deploy	Achieve nearest strategic goals	Achieve major war objectives
Importance of results	Relatively minor	Result can affect course of war, and perhaps outcome of the war	Result can directly determine the outcome of the entire war and place the country in extreme circumstances

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ENDNOTES

1. Ivanov (1971a; 42), Ivanov (1974), most of the Ivanov (1971a article appears later as the introduction to his 1974 book.

2. Rukhle (1959; 3-18), Kolgushkin & Bershadskiy (1960; 50-51).

3. see, for example, Viktorov (1962).

4. Kolgushkin & Bershadskiy (1960), Mernov (1960), Cherednichenko (1961).

5. Viktorov (1960;122-123).

6. Kolgushkin & Bershadskiy (1960;53-54).

7. Mernov (1960;40).

8. Cherednichenko (1961), Zakharov (1961).

9. Ivanov (1971; 36).

10. Ivanov (1971; 36, note 11. on pg. 42-43).

11. Bagramyan (1981;21), Yevseyev (1985;10-12), this issue has also bee discussed in books published since 1971 such as Ivanov (1974; 21), Ivanov & Kir'yan (1978; 557), Kir'yan (1985; 185), and Gareyev (1985a; 241-243).

12. Bagramyan (1981; 20, 27).

13. Bagramyan (1981;20-21).

14. Yevseyev (1985; 15, 18).

15. see Rukhle (1959;8-9).

16. see Ivanov (1971;39-40), Gareyev (1985a;241) who notes Sokolovskiy(1968;22).

17. Lipitskiy (1963;11).

18. see Gareyev (1985a; 241-243).

19. see, for example, Lipitskiy (1963;12-13,19-20), Zaporozhchenko & Galitskiy (1984;39-40).

20. see Kozlov (1959;especially pg. 3).

21. Alferov (1981; 33).

22. Kolchigan (1961),

23.　see Partan (1986),

24.　Mernov (1960;34).

25.　Proektor (1966;27-33), Rukhle (1959;6,17).

26.　Lipitskiy (1963;18).

27.　Zaporozhchenko & Galitskiy (1984;39-40), others

28.　see Rukhle (1959;5-9), Kozlov (1959), Lipitskiy (1963;12-13,18,24), Zaporozhchenko & Galitskiy (1984;39-40), Yevseyev (1985;18).

29.　Zakharov (1961;14).

30.　see, for example, Matsulenko (1984;38-39).

31.　Karnyukhov (1984;5-6).

32.　see Mernov (1960;33), Kurkotkin (1984).

33.　see, for example, Baskakov (1966;32-33).

34.　Alferov (1981;33).

35.　Gareyev (1985; 32).

36.　Kozlov (1959;17), Lipitskiy (1963), Proektor (1966;33), Ivanov (1971;39-40), Gareyev (1985a;241-243), Yevseyev (1985;22).

37.　this will be discussed in more detail below, and see Lipitskiy (1963), Proektor (1966;38), Ivanov (1971).

38.　Kozlov (1959;17).

39.　Lipitskiy (1963; 23-24).

40.　Meyer (1986).

41.　Kozlov (1959;13), Proektor (1966;27), Lipitskiy (1963).

42.　Lipitskiy (1963;24).

43.　Alferov (1981;33), Bagramyan (1981;21), Yevseyev (1985;20).

44.　Yevseyev (1985; 20).

45.　Kir'yan (1985; 114).

46.　Gareyev (1985a;241-243).

47.　Rukhle (1959;16).

48. Rukhle (1959;16), Korkodinov (1965;30), others

49.   Rukhle (1959;16-17), Cheredhichenko (1961;30), Zakharov (1961;6-7), Lipitskiy (1963;14,19), Korkodinov (1965;27-29).

50. Matsulenko (1984;38), Zaporozhchenko & Galitskiy (1984;45).

51. Rukhle (1959;16-17), Cherednichenko (1961;34), Zakharov (1961;6), Korkodinov (1965;30-34), Baskakov (1966;32), Matsulenko (1984;43-47), Gurkin (1984), Mayorov (1985).

52. Rukhle (1959;17).

53. Gurkin (1984; 18).

54. see, for example, Mayorov (1985), Gurkin (1984; 19).

55. Koldunov (1984;19), Matsulenko (1984;40).

56. Zakharov (1961; 8).

57. see, for example Mayorov (1985; 39).

58. see Mayorov (1985).

59. Cherednichenko (1961;34), Zakharov (1961;12-13), Matsulenko (1984;40), Mayorov (1985;42).

60. Matsulenko (1984;43).

61. Koldunov (1984;16-17).

62. Rukhle (1959; 17), Viktotov (1960;119), Proektor (1966;33-34).

63. Proektor (1966; 34).

64. Rukhle (1959; 17), Zakharov (1961; 9-10), Mayorov (1985; 32-33, 39), Gurkin (1984; 17,19).

65. see Rukhle (1959; 17), Zakharov (1961; 6).

66. Proektor (1966; 33-35).

67. Gurkin (1984; 19), Mayorov (1985; 32-33).

68. Skryabin & Medvedev (1984;34-35).

69. Kozlov (1959;6), Kolgushin & Bershadskiy (1960;60), Proektor (1966;34-35), Mayorov (1985;40).

70. Proektor (1966;34-36).

71. Gareyev (1985b;27), Kolgushin & Bershadskiy (1960:5).

72. Kolgushin & Bershadskiy (1960:51).

73. Baskakov (1966;32-33), Kolgushin & Bershadskiy (1960;51).

74. Lipitskiy (1963:24).

75. see, for example, Kolduncv (1984), Bagramyan (1981;25-26).

76. Rukhle (1959;6-7,16), Alferov (1981;31).

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